

CSCI 361: Reading Assignment # 11

Your Name: _____

Due: Tuesday, Nov 5, in class

Assigned reading for this lecture:

- Sipser Third Edition Chap 5.1

(Reduction via Computation Histories) To prove that some properties of the language of CFGs such as ALL_{CFG} (Is the language of a given CFG contain all strings) and EQ_{CFG} (do two CFGs have the same language) we need a new reduction technique that uses the computation histories of TMs. Read **Definition 5.5** on Page 221 and the proof of Theorem 5.13 on Page 225.

Questions:

1. Consider the grammar G in the proof. If M does not accept w then what is its language?
2. Why does the PDA alternate between a string that is a TM configuration and a string that is the reverse of TM configuration?